

S.N.: 10/004,723
Art Unit: 2663

AMENDMENTS TO THE DRAWINGS:

The attached sheets of drawings includes changes to Figs. 2 and 3, and replace the original sheets of drawings. In these Figures the identifiers for the individual blocks labeled A, B, etc. have been revised to include the Figure number, e.g., 2A, 2B, etc.

Attachment: Replacement Sheets 3 (3 sheets of formal patent drawings)
Annotated Sheets Showing Changes 2

REMARKS

The attached replacement sheets of drawings and the amendments to the corresponding portions of the specification should render mute the objection to the drawings under 37 CFR 1.84(p)(5).

Claims 1 and 11 are rejected under 35 USC 102(e) as being anticipated by US 6,597,920 (Yegani et al.), while claims 2-6, 10, 12-15, 19-21 and 24-28 are rejected under 35 USC 103(a) as being unpatentable over Yegani et al. in view of US 2002/0082033 A1 (Lohtia et al.) These rejections are respectfully disagreed with, and are traversed below.

The objection to claims 7-9, 16-18, 22 and 23 is noted with appreciation. As will be shown below, the claims from which these claims depend are patentable in their own right. However, the applicant reserves the right to amend these claims in the future to place them in independent form.

Independent claim 1 recites:

A mobile station executed method for changing from a current cell to a new cell in a wireless packet data network, comprising:

entering the new cell;

generating a cell change packet data unit (PDU) message for informing the network of the location of the mobile station in the new cell;

buffering the cell change PDU message into a PDU transmit queue before any buffered PDUs that were present before the mobile station entered the new cell; and

transmitting the buffered cell change PDU before any of the buffered PDUs that were present before the mobile station entered the new cell. (emphasis added)

Independent claim 11 recites:

A mobile station comprising a packet data buffer and a controller that is responsive to changing location from a previous cell to a new cell in a wireless packet data network for generating a cell change packet data unit (PDU) message for informing the wireless packet data network of the presence of the mobile station in the new cell and for buffering the cell change PDU message into the packet data buffer such that it is selected for transmission prior to any buffered PDUs that were present before the mobile station entered the new cell, said mobile station comprising a transmitter for transmitting the buffered cell change PDU for informing the wireless packet data network of the cell in which the mobile station is currently located so that packet data intended for the mobile station is not transmitted into the previous cell by the wireless packet data network. (emphasis added)

It is respectfully pointed out that Figure 5 of Yegani et al. is the Figure that is relevant to a call flow diagram illustrating "a communication protocol used by the present invention for a successful mobile station call origination with priority access channel assignment during an idle handoff." Reference is also made to the corresponding portion of the specification at col. 12, line 56, to col.15, line 58 (which were not referenced by the Examiner when making the rejection under 35 U.S.C. 102(e)). This is apparently the PACA communication protocol for idle handoffs that is referred to in col. 4, lines 41-59, a section partially referenced by the Examiner. A careful review of this section of Yegani et al., and in fact of the entire description of Yegani et al., does not find a disclosure that would anticipate claims 1 and 11.

This is made particularly evident in the portion of Yegani et al. that the Examiner states anticipates the claim element, as in claim 1, of "buffering the cell change PDU message into a PDU transmit queue before any buffered PDUs that were present before the mobile station entered the new cell". In fact, what is disclosed in col. 10, line 66, to col. 11, line 10, is the following:

"In yet another alternative embodiment, the base station BS may include a single data structure with a data field indicating the position within the queue. This is illustrated in FIG. 3C where PACA requests are stored in a queue in the order in which they are received, regardless of their position in the queue. A data field, indicated in FIG. 3C as a queue position, stores a number indicative of the position of a pending PACA request within the queue. Other known forms of data structures may also be satisfactorily used to implement the

queue. It should be clear that the present invention is not limited by the specific form of data structure or system architecture used to implement the queue.

This is, any buffering in a queue that is occurring in Yegani et al. is in the context of a Base Station queue, not a mobile station queue as recited in claim 1. Note that claim 1 is drawn to a **"mobile station executed method"** for changing from a current cell to a new cell in a wireless packet data network.

With regard to the last element of claim 1, i.e., "transmitting the buffered cell change PDU before any of the buffered PDUs that were present before the mobile station entered the new cell", col. 12, lines 5-15, state only the following (reproducing the entire paragraph for context):

FIG. 2 illustrates the operation of the PACA system and protocol for a successful call completion where the user remains in the queue until resources become available. Under some circumstances, the system will not allow a PACA request. For example, when resources are not available, or the PACA priority request is not authorized, the system generates a PACA Refusal message, as illustrated in FIG. 4. **In FIG. 4, the steps performed at times a-c are identical to the steps performed at times a-c of FIG. 2. That is, the mobile station MS transmits an Origination Message (time a) with the one bit data field PACA_REORIG set to "0." The base station BS transmits the Base Station Acknowledgment Order message (time b) to the mobile station MS. The base station BS transmits the CM Service Request message (time c), including the PACA re-origination indicator element set to the same value as the one bit data field PACA_REORIG as well as the data field indicating the availability of resources.**

It is not understood how the Examiner can construe this section of Yegani et al. to be relevant to the last element of claim 1. If the Examiner maintains the rejection, then clarification is required.

The arguments made above to with regard to claim 1 are repeated with regard to independent claim 11.

The Examiner is respectfully reminded that for a rejection to be made on the basis of anticipation,

it is well recognized that "to constitute an anticipation, all material elements recited in a claim must be found in one unit of prior art", Ex Parte Gould, BPAI, 6 USPQ 2d, 1680, 1682 (1987), citing with approval In re Marshall, 578 F.2d 301, 304, 198 USPQ 344, 346 (CCPA 1978).

As should be apparent, the Priority Access Channel Assignment (PACA) teachings of Yegani et al. that were specifically cited by the Examiner clearly do not anticipate claims 1 and 11, as not all material elements of these claims can be found. Further, that portion of Yegani et al. that is directed to the PACA idle handoff also contains no disclosure that would anticipate the claimed subject matter. It is noted that the reference to a queue in col. 14, lines 39-42, and col. 14, line 51 to col. 15, line 39, is to a Base Station PACA request queue, and thus clearly would not anticipate, as in claim 1, at least the claimed subject matter of the mobile station:

buffering the cell change PDU message into a **PDU transmit queue** before any buffered PDUs that were present before the mobile station entered the new cell;
and

transmitting the buffered cell change PDU before any of the buffered PDUs that were present before the mobile station entered the new cell,

and would clearly also not anticipate, as in claim 11, at least the claimed subject matter of the mobile station:

buffering the cell change PDU message into the packet data buffer such that it is selected for transmission prior to any buffered PDUs that were present before the mobile station entered the new cell, said mobile station comprising a transmitter for **transmitting the buffered cell change PDU** for informing the wireless packet data network of the cell in which the mobile station is currently located so that packet data intended for the mobile station is not transmitted into the previous cell by the wireless packet data network

At least for the reasons argued above, the Examiner is respectfully requested to reconsider and remove the rejection of claims 1 and 11 under 35 U.S.C. 102(e) as being anticipated by Yegani et al.

Based on the foregoing argument it should also be very apparent that the Examiner's statement, with regard to claim 20, that Yegani et al. "teaches substantially all the claimed invention" is not correct, and thus the attempt to combine Yegani et al. with the GPRS network element teachings of Lohtia et al., which is not admitted is suggested, would still not render claim 20 unpatentable.

Independent claim 20 is drawn to a method for informing a Serving General Packet Radio Service (GPRS) Support Node (SGSN) of a wireless network that a Mobile Station (MS) has made a cell change, comprising:

changing from a first cell to a second cell with the MS; and

prior to the SGSN receiving a communication from the MS, notifying the SGSN of the MS cell change. (emphasis added)

It is pointed out that the words "handoff", "handover" or "cell change" are not believed to be found in Lohtia et al. Thus, the Examiner's attempt to combine the teachings of the two cited references would still not render the subject matter of claim 20 unpatentable.

Independent claim 27 is drawn to a method for organizing PDUs into a transmit queue, comprising:

passing a PDU to a Radio Link Control (RLC) unit, the PDU having a flag for indicating a priority of the PDU relative to other PDUs;

storing the PDU into the transmit queue in accordance with the indicated priority; and

transmitting the stored PDU to a radio channel before any stored PDUs having a lower priority.

For the reasons argued above, it is not seen where the proposed combination of Yegani et al. and Lohtia et al. renders this claim unpatentable. Col. 10, line 53, to col. 11, line 10 of Yegani et al. was reproduced partially above. As was noted, this portion of Yegani et al. is descriptive of the PACA request queue maintained by the Base station.

S.N.: 10/004,723
Art Unit: 2663

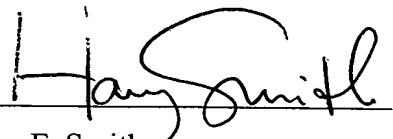
All claims that depend from the independent claims 1, 11, 20 and 27 should also be found to be allowable, at least for the reason that each depends from a claim that should be found to be allowable over Yegani et al., or over the proposed combination of Yegani et al. and Lohtia et al. As but one example, dependent claim 28 further modifies claim 27 by stating that the "RLC unit is associated with a mobile station, where the PDU is a cell change PDU, and where the cell change PDU is assigned a highest priority." The claimed subject matter is clearly not found in either Yegani et al. or in Lohtia et al., and is thus also clearly allowable over these two references alone or in combination.

Claims 29-42 are newly added. Some of these claims are drawn to a computer program, the support for which may be found in the specification at least in Fig. 1 and at page 9, lines 6-17. No new matter is added.

The Examiner is respectfully requested to reconsider and remove the rejection of claims 1-6, 10-15, 19-21 and 24-28 under 35 USC 102(e) and 35 USC 103(a), and to allow all of the pending claims 1-42 as now presented for examination. An early notification of the allowability of claims 1-42 is earnestly solicited.

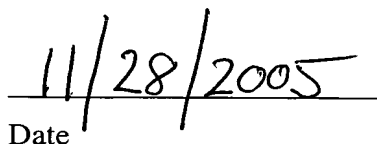
S.N.: 10/004,723
Art Unit: 2663

Respectfully submitted:



Harry F. Smith

Reg. No.: 32,493



Date

Customer No.: 29683

HARRINGTON & SMITH, LLP
4 Research Drive
Shelton, CT 06484-6212

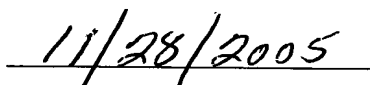
Telephone: (203)925-9400

Facsimile: (203)944-0245

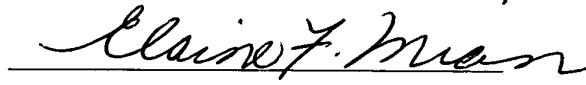
email: hsmith@hspatent.com

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450.



Date



Name of Person Making Deposit

MS CHANGES
CELLS WITH
BUFFERED
LLC PDU(s),
REQ LLC PDU 2A

COMPOSE SHORT
CELL CHANGE
LLC PDU, SEND
TO RLC/MAC 2B

STORE LLC PDU
IN FRONT OF
QUEUED
LLC PDU(s) 2C

INITIATE UL
TBF ESTAB-
LISHMENT
PROCEDURE 2D

TRANSMIT
CELL CHANGE
LLC PDU
BEFORE ANY
QUEUED LLC PDU 2E

NETWORK
REDIRECTS
DL PDUs TO
MS IN NEW
CELL 2F

FIG. 2



MS MAKES
ACCESS IN NEW
CELL WITH
CELL UPDATE
INDICATED 3A

FIG. 3

ESTABLISH UL
TBF
FOR TRANSFERRING
LLC PDUs 3B

BASED ON
TLLI, NETWORK
DOES/DOES NOT
NOTIFY SGSN
OF MS'S NEW CELL 3C